

Niagara Falls, NY

Long Range Plan

Umetco Minerals Corporation

Rev 0, April 25, 1996

Rev 1, August 25, 1999

UCCNHT0000116

1.0 SITE HISTORY

Union Carbide Corporation (UCC) / Umetco Minerals Corporation (Umetco) conducted metals processing operations at a facility in Niagara Falls, NY from 1919 to 1986. On April 23, 1986, U.S. Vanadium Corporation (USV) acquired the facility pursuant to a purchase agreement. UCC/Umetco assumed certain liabilities for the site pursuant to an associated environmental agreement (EA) dated May 13, 1986. USV/Strategic Minerals Corporation (Stratcor) is believed to be currently operating the site facilities in a similar manner and is producing similar products as UCC/Umetco had previously.

Apparently based on a January 1, 1990 (amended June 4, 1992) Environmental Management Services and Liabilities Allocation Agreement between UCC, UCC&P, UCAR Carbon, UCIG, and UC Coating Services Corporation and a June 9, 1994 Settlement Agreement between UCC and Praxair, Umetco's environmental cleanup obligations at the site were reaffirmed and Praxair became USV's lessor (Morgan, 1996).

The approximate 25-acre site is situated as follows (see Figure 1-1):

- bound to the north by former Simmons Avenue (abandoned by the City of Niagara Falls on December 10, 1928 and reverted to UCC)
- bound to the west by Elkem Metals Company (Elkem) and UCC Linde (now Praxair?) properties, and by 47th Street,
- bound to the south by UCC Linde Division (now Praxair?) and Hooker Energy Corporation properties, and
- bound to the east by L-Tec property

In 1986, there were approximately forty buildings/structures on the property, as depicted in Figure 1-1.

Processing operations previously conducted at the site are not well known. Some specific operations that were conducted on the adjoining Linde (Praxair?) and Elkem properties are sometimes associated with the subject property, sometimes adding confusion. From the rather meager record available, it appears that site operations included metals work with elements ranging from atomic number 13 (aluminum) to 92 (uranium). Some of the materials used and disposed reportedly exhibited elevated radioactivity.

2.0 SITE CONTROLS

2.1 Access Controls

In preparation for my site visit of October 1, 1996, I contacted Mr. Dan Harris (USV, Hot Springs, AR) and Mr. Roger Legg (USV, Niagara Falls, NY) for logistical purposes. Mr. Legg informed me that USV leased approximately 7 acres of the former 25-acre site from Praxair, and that I was welcome to examine the 7-acre leased portion. With regard to the

UCC
LINDE DIVISION

General Plan of Niagara Plant

615-20227 Rev. 0 3-6-86

Scale 1" \approx 150' \rightarrow N



Umetco Niagara
Falls Site

By: jwDavis
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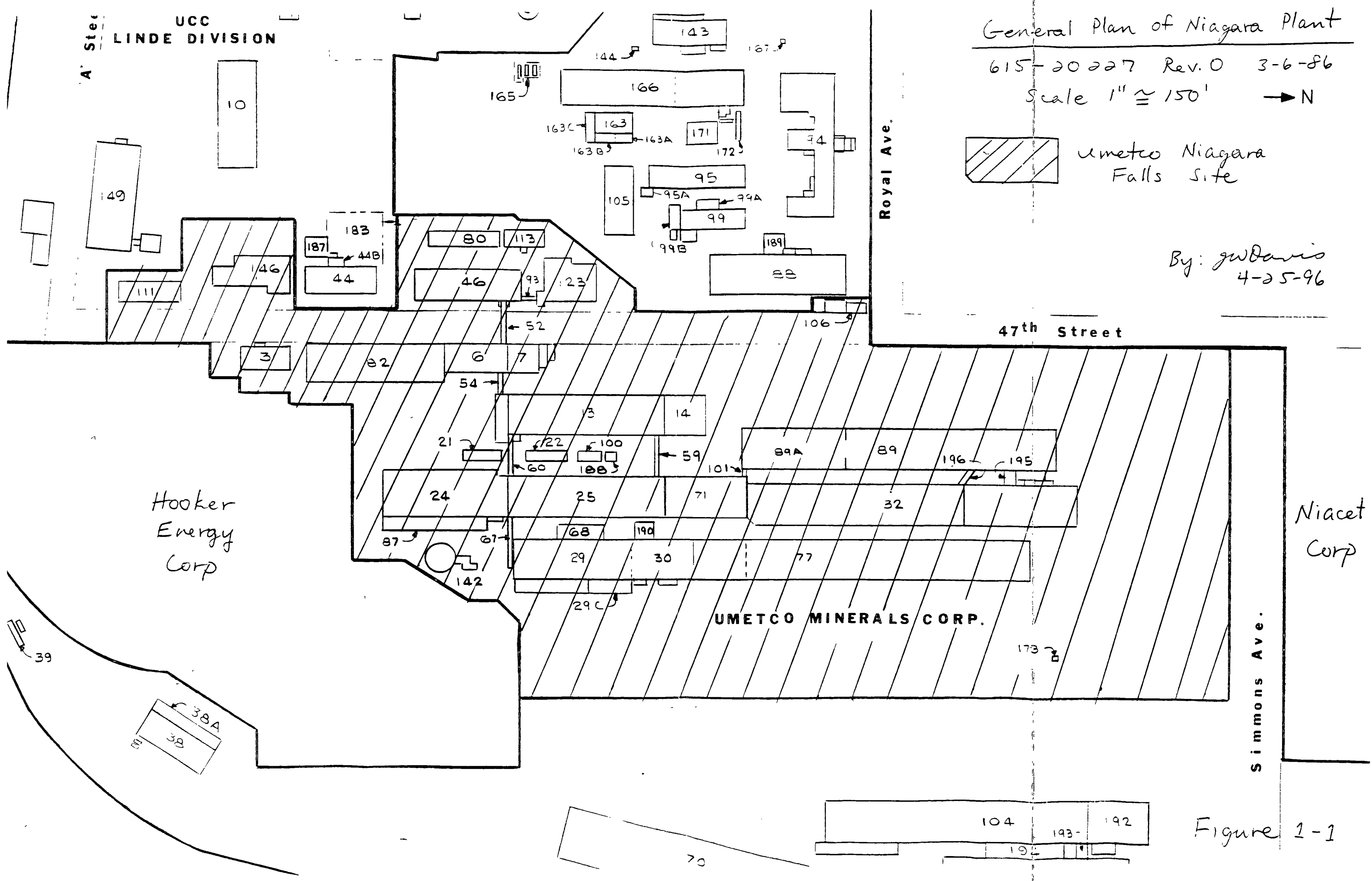


Figure 1-1

remaining approximate 18 acres, he said that I would have to obtain authorization from Praxair for access. He suggested that I contact Praxair's site manager, Ms. Elizabeth Kashawnee (spelling?) at (716)286-4616. I contacted her on September 19, 1996 and she said that I could not gain access to the site until Umetco had discussed access conditions with Praxair's counsel, Mr. John Sibley (spelling?) (203)837-2285.

While I was visiting the site on October 1, 1996, Mr. Legg contacted Ms. Kashawnee, suggesting to her that she allow me access to the 18-acre remainder of the site, and she again declined to allow access.

Accordingly, access to the approximate 7-acre portion of the site currently leased to USV, apparently by Praxair, is controlled by USV. Access to the remainder of the site is controlled by Praxair, and Praxair has repeatedly denied access to Umetco.

It is reported (Cooney, 1997) that a portion of the site (e.g., former "Lake Linde") has been converted to a graveled roadway/parking lot/construction laydown area by agreement between American Ref-Fuel and Praxair. We have USV's endorsement of completion of the remedial action of Lake Linde. During my site visit of October 1996, I observed a large pile of apparent used railroad ties in this area.

2.2 Other Controls

The other site controls in-place at the Niagara Falls site are generally unknown at this time. Reference to a purchase agreement dated April 23, 1986, among UCC, Umetco, and Stratcor, is provided in the associated environmental agreement of May 13, 1986, however, a copy of this purchase agreement is not currently available.

The environmental agreement of May 13, 1986, between UCC/Umetco and USV/Stratcor contains provisions including:

- Requires UCC/Umetco to transfer to USV all of the environmental permits, licenses, and approvals as identified in the purchase agreement.
- Holds UCC/Umetco liable, and USV/Stratcor harmless, for any and all claims resulting from UCC/Umetco's business operations at the site prior to the sale to USV/Stratcor.
- Holds USV liable, and UCC/Umetco harmless, for any and all claims resulting from USV's business operations at the site from and after May 13, 1986.
- Requires UCC/Umetco to perform work as specified in Article 3 of the Environmental Agreement.

- Subsequent to the USV-accepted completion of the work specified in Article 3, relieves UCC/Umetco of associated indemnification obligation to USV
- Excepting PCB and asbestos work specified in Article 3(a) and 3(e), relieves UCC/Umetco of other specific PCB and other general asbestos indemnification obligations
- "Upon termination of production of products at the Niagara Falls Facility", UCC/Umetco and USV/Stratcor agree to share remedial costs, with USV/Stratcor's share capped
- UCC/Umetco's indemnification obligation does not cease in the event of site listing under CERCLA

3.0 UNIQUE SITE ISSUES

With the limited information available, identified issues are limited at this time

- exactly what (spatially) constitutes the "Niagara Falls Facility", i.e. the site,
- what is the proposed ultimate fate of the property and who will decide it,
- determining environmental liabilities at the site due to UCC/Umetco business operations prior to the sale versus USV's environmental liabilities due to their business operations since, and
- based on Umetco's experience, it is expected that the prior work with radioactive materials at the site indicates the probable need for future work, as radiological remedial actions conducted in years past often require additional work upon re-examination

4.0 FUTURE PROJECTS

In 1996, planned future projects (Umetco, 1996) included Phase I and Phase II environmental site assessments (ESA) (ASTM, 1994) only. These projects were delayed for budgetary reasons. While these assessments would no doubt yield valuable information, and are still planned for herein, they are generally too unfocused to provide the specific information needed to complete the specific EA Article 3 items. Phase I and Phase II information will likely be of most use in helping to scope final reclamation activities, potentially contaminated adjacent properties, potentially complex groundwater regimes, and other potentially difficult issues on the road to possible property divestiture, assuming that is the goal. It is assumed herein that the conduct of a Phase I ESA will lead to the conclusion that a Phase II ESA is necessary.

The clear identification of the requisite future projects at the site are complicated by several factors, including the unique issues above and

- Some of the facilities requiring work pursuant to Article 3 of the EA are located in portions of the site covered by the original lease which USV has turned back to Praxair
- Praxair has denied Umetco access to the site
- Some work required by the Article 3 items, e.g. Article 3(a), involve off-site facilities or is too vague to be quantitatively demonstrated as complete. For example, it appears that several of the transformers addressed by this item are/were not on the "site" as covered by the EA, but are located on the adjacent Linde property (Hansen, 1987a). Article 3(a) includes the vague requirement for the disposal of 27 "miscellaneous capacitors." There is a memorandum in my file indicating that the associated disposal and cleanup was conducted under the direction of USV personnel, and that the "Waste Transport Manifests" may be in their files (Hansen, 1987a).

4.1 Environmental Agreement Work Not Completed

The incomplete work includes the following

- Article 1(e) - Restore, reclaim, & remedy plant and other areas
- Article 3(a) - Remedy specific PCBs
- Article 3(b) - Complete halide scrubber
- Article 3(e) - Remedy asbestos
- Article 3(h) - Reclaim plant area
- Article 3(k) - Remedy USTs

While USV has acknowledged, by document endorsement, the completion of EA Article 3(h), this article includes provisions for the shared "cost of reclamation of the plant area" at the termination of USV's operations at the site.

There are documented unsuccessful attempts to obtain USV's concurrence of completion of Articles 3(a), 3(b), and 3(e) (Hansen, 1986, 1987, 1987a). I have found no documents beyond the EA and Hansen's summary report (Hansen, 1987b) concerning Article 3(k).

Article 3(j) concerns the disposal of miscellaneous materials and is the responsibility of USV, the Buyer. All other Article 3 items (3[c], 3[d], 3[f], 3[g], 3[i], and 3[l]) have been completed by Umetco and accepted by USV.

The following proposed projects are based on the premise that Praxair allows unfettered access to the site. See Table 4-1.

4.2 Article 3(a) - Remedy PCBs

I recommend contracting with UNISON for the following tasks

- 1) Assemble the records from UNISON's testing and disposal to identify remaining transformers and capacitors covered by the EA that have not been tested, retrofilled, and/or disposed
- 2) Find and inventory the associated transformers and capacitors on site
- 3) Develop a plan for testing, retrofilling, and disposal, as necessary
- 4) Implement the plan

4.3 Article 3(b) - Complete Halide Scrubber

I still recommend that Umetco seek USV's concurrence that this EA item is complete by sending a memorandum, comparable to that previously suggested, for their endorsement. USV personnel have verbally indicated to me that they agree that this item is complete. No further work is required.

4.4 Article 3(e) - Remedy Asbestos

The offending facility is the global elevator located on Praxair-controlled property. The global elevator has apparently failed to pass one or more asbestos clearance tests, e.g. aggressive air sampling, even though all visible asbestos has apparently been removed. I recommend that we have the elevator examined and sampled to assess the likelihood of ultimate clearance. If this looks unlikely, then we may want to assess demolition and disposal alternatives.

4.5 Article 3(k) Remedy USTs

I have found no documentation of any work conducted on this item. During my site visit, USV personnel indicated that all USTs on site (three) had been remedied about 1989; however, I found one possible UST, based on the observation of an apparent filler-port and vent pipe, during my brief time on site.

I recommend that we investigate the site for USTs, possibly by a Phase I (ESA) records search, coupled with focused UST site reconnaissance. Once possible USTs have been found, we can plan our remediation, e.g. how much pre-remedial investigation, regulatory requirements, probable waste forms and treatment and/or disposal requirements, etc.

By J. W. Davis

Date 8/27/99

Table 4-1

Potential Future Projects
Niagara Falls, NY Site
(per May 13, 1986 Environmental Agreement)

Environmental Agreement Article No.	Work Description	Tasks	Estimated Cost	Schedule	Critical Assumptions
3(a)	Remedy specific PCBs	1) Assemble testing/disposal records 2) Inventory specified PCB devices 3) Develop plan for testing, disposal, etc 4) Implement approved plan 5) Obtain USV's endorsement of completion	\$25,000	2000	1) Praxair provides unfettered access 2) Only involved device is transformer 143 3) 143 is testable and found @ >50ppm PCBs 4) All other devices are Praxair's responsibility
3(b)	Complete halide scrubber	1) Umetco provides USV with certification of completion 2) USV endorses certification	Minimal	1999	1) Umetco agrees on form of certification 2) USV endorses certification
3(e)	Remedy global elevator asbestos	1) Examine elevator and aggressively air sample 2) Plan for further remedial action or demolition, depending on findings	\$10,000	2000	1) Praxair provides unfettered access 2) No future use of structure is planned opening demolition option
		3) Implement approved plan 4) Obtain USV's endorsement of completion	Not estimated	2001	1) Same as above 2) Further remedy is required
3(k)	Remedy USTs	1) Investigate for presence of USTs 2) Plan for investigations & remedial action	\$5,000	2001	1) Praxair provides unfettered access 2) USTs are identified 3) UST records search is performed as part of Phase I ESA below
		3) Implement approved plan 4) Obtain USV's endorsement of completion	Not estimated	2002	1) Same as above 2) UST presence requires remedy

Table 4-1: continued

**Potential Future Projects
Niagara Falls, NY Site
(per May 13, 1986 Environmental Agreement)**

Environmental Agreement Article No.	Work Description	Tasks	Estimated Cost	Schedule	Critical Assumptions
NA	Phase I ESA	1)Perform and report ESA	\$21,000	2000	1)Praxair provides unfettered access 2)Acceptable ESA firm can be contracted in site area 3)Only one site visit by Umeco person will be required
NA	Phase II ESA	1)Review results of Phase I ESA 2)Perform and report Phase II ESA	Not estimated	2001	1)Praxair provides unfettered access 2)Phase I ESA identifies present, past, or material threat of release
1(e) and 3(h)	Reclamation of plant area & other areas not specified in EA	1)Characterize plant & other areas 2)Plan for remedial action 3)Conduct remedial action	Not estimated	None	1)Praxair provides unfettered access 2)USV terminates operations 3)Remedial action is necessary

References

American Society for Testing and Materials (ASTM). "Standard Practice for Environmental Site Assessments for Commercial Real Estate". E1527-94 and E1528-93, second edition. June 1994

American Society for Testing and Materials, "Standard Practice for Environmental Site Assessments Phase I Environmental Site Assessment Process", E1527-97, May, 1997

Cooney, M R (U S Vanadium Corporation), memorandum to J W Davis (Umetco). July 31, 1997

"Environmental Agreement (Niagara Falls)" (EA). between UCC/Umetco (Seller) and USV/Stratcor (Buyer), May 13, 1986

Hansen, D J (Umetco), memoranda to C T Wentzel (USV), December 16, 1986, January 14, 1987, and January 19, 1987a

Hansen, D J (Umetco), "Summary Report, Withdrawal of Umetco From Niagara Falls", February, 1987b

Morgan, P J (Umetco), memorandum to R Garver (Umetco), June 10, 1996

Umetco Minerals Corporation. "Niagara Falls, NY Long Range Plan", Rev 0, April 25, 1996